

AMENDMENTS TO THE CLAIMS

Please cancel claim 33. No claims are added or amended by this paper. Below is a listing of the claims currently pending in this application.

1. **(Original)** A package for an electro-optic device, comprising:
 a substrate having an upper surface;
 an electro-optic device mounted over the upper surface of the substrate, the electro-optic device having a first optical port and a second optical port; and
 a cap that forms a hermetic seal around the electro-optic device, the cap comprising:
 a first window positioned to allow optical coupling between outside of the cap and the first optical port; and
 a second window positioned to allow optical coupling between outside of the cap and the second optical port.
2. **(Original)** The package of claim 1, further comprising:
 a first optical fiber mounted over the upper surface of the substrate at a first end; and
 a second optical fiber mounted over the upper surface of the substrate and an opposing second end.
3. **(Original)** The package of claim 1, further comprising:
 a first lens mounted over the upper surface of the substrate and in optical communication with the first optical fiber; and
 a second lens mounted over the upper surface of the substrate and in optical communication with the second optical fiber.
4. **(Original)** The package of claim 1, wherein the cap is mounted directly on the upper surface of the substrate.
5. **(Original)** The package of claim 1, further comprising:
 a mounting plate on the upper surface of the substrate, wherein the cap is attached to the mounting plate.
6. **(Original)** The package of claim 1, wherein at least one of the windows includes a lens for optically coupling between outside the cap and the corresponding optical port.

7. **(Original)** The package of claim 1, wherein the cap comprises a metal.
8. **(Original)** The package of claim 1, wherein the electro-optic device is supported by a submount on a spacer block.
9. **(Original)** The package of claim 8, wherein the submount has metal leads for providing electrical connection to the electro-optic device.
10. **(Original)** The package of claim 1, wherein the substrate further comprises:
 a first via hole located within a portion of the substrate enclosed by the cap, the first via hole having a first end and a second end, the first end for making electrical contact with the electro-optic device.
11. **(Original)** The package of claim 10, wherein the substrate further comprises:
 a second via hole located within a portion of the substrate not enclosed by the cap, the second via hole having a first end and a second end, the second end of the second via hole electrically coupled to the second end of the first via hole.
12. **(Previously presented)** The package of claim 11, wherein the substrate further comprises:
 a conductive plate electrically coupling the second end of the first via hole with the second end of the second via hole.
13. **(Original)** The package of claim 1, further comprising a housing surrounding the substrate.
14. **(Original)** The package of claim 13, wherein the housing comprises a lid and a bottom portion for supporting the substrate.
15. **(Original)** The package of claim 13, wherein the housing comprises a plastic material.

16. **(Original)** The package of claim 1, wherein the electro-optic device comprises a semiconductor optical amplifier.

17. **(Original)** The package of claim 1, wherein the substrate comprises a multi-layer ceramic substrate.

18. **(Original)** The package of claim 1, wherein the substrate comprises a ceramic substrate.

19. **(Original)** The package of claim 18, further comprising:
 a thermo-electric cooler, wherein the ceramic substrate functions as a cool plate of the thermo-electric cooler.

20. **(Original)** The package of claim 19, further comprising a plurality of semiconductor elements connected in series between the cool plate and a warm plate of the thermo-electric cooler.

21. **(Original)** The package of claim 1, further comprising:
 a thermo-electric cooler having a cool plate and a warm plate, wherein the cool plate is in thermal contact with the substrate and the warm plate serves as a mounting plate for the package.

22. **(Original)** The package of claim 21, further comprising a plurality of semiconductor elements connected in series between the cool plate and the warm plate.

23. **(Withdrawn)** A package for an optical device comprising:
 a substrate having a top surface and a recessed area;
 an optical device mounted in the recessed area; and
 a window covering the recessed area, the window forming a hermetic seal for the optical device.

24. **(Withdrawn)** The package of claim 23, further comprising:
 means for redirecting an optical signal between an optical path located along the top surface and the optical device mounted in the recessed area.

25. **(Withdrawn)** The package of claim 24, wherein the means for redirecting an optical signal comprises a plurality of reflective devices.

26. **(Withdrawn)** The package of claim 25, wherein the reflective devices are mirrors.

27. **(Withdrawn)** The package of claim 24, wherein the means for redirecting an optical signal comprises a plurality of devices selected from the group consisting of refractive devices, diffractive devices, waveguides, couplers, and combinations thereof.

28. **(Withdrawn)** The package of claim 23, wherein the optical device comprises a semiconductor optical amplifier.

29. **(Withdrawn)** The package of claim 23, wherein the optical device comprises a photodetector.

30. **(Withdrawn)** The package of claim 29, further comprising a partially reflective device that taps a portion of light from an optical path located along the top surface so that the portion of light is redirected to the photodetector.

31. **(Withdrawn)** The package of claim 23, further comprising:

- a first reflective device for redirecting light from a first optical path located along the top surface to the recessed area;

- a second reflective device in the recessed area for redirecting light from the first reflective device to an optical input of the optical device;

- a third reflective device in the recessed area for redirecting light from an output of the optical device to the top surface; and

- a fourth reflective device for redirecting light from the third reflective device along a second optical path located along the top surface.

32. **(Withdrawn)** The package of claim 23, wherein:

- the substrate includes multiple layers; and

- one or more of the layers have holes that form the recessed area.

33. (Cancelled)

34. (Previously presented) The package of claim 1, wherein the electro-optic device includes at least one face that is oriented non-perpendicularly with respect to at least one of: an signal input to the electro-optic device; and, a signal output from the electro-optic device.